

Applicant: Robinson, et al.
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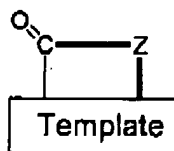
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

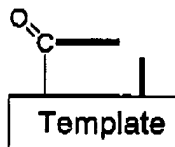
Claims 1-17 (canceled).

18. (Currently Amended) A process for the manufacture of compounds of the general formula



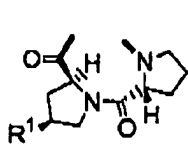
wherein

Z is a chain of n α -amino acid residues which, if their α -C atom is asymmetric, have L-configuration, n being an integer from 4 to 20, the positions of said amino acid residues in said chain being counted starting from the N-terminal amino acid;

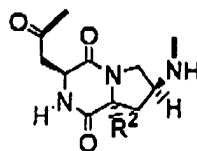


is one of the groups of formulae

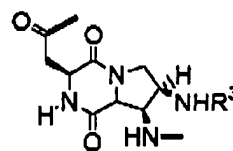
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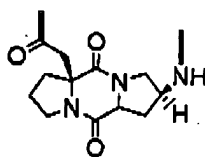
(a)



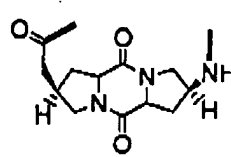
(b)



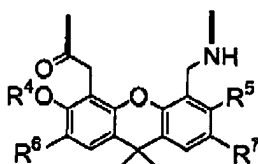
(c)



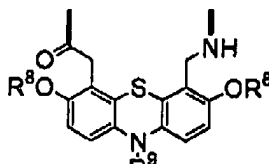
(d)



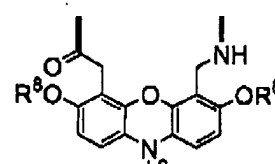
(e)



(f)



(g)



(h)

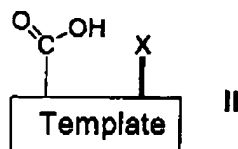
- R^1 is hydrogen or a protected amino group;
 R^2 is hydrogen or a group of formula CH_2-COOR^{10} ;
 R^3 is an amino-protecting group;
 R^4 is lower alkyl or aryl-lower alkyl;
 R^5 is lower alkyl, lower alkoxy or aryl;
 R^6 is hydrogen, lower alkyl, substituted lower alkyl, aryl, Br or NO_2 ;
 R^7 is hydrogen, lower alkyl, substituted lower alkyl, aryl, Br or NO_2 ;
 R^8 is lower alkyl, substituted lower alkyl or aryl-lower alkyl;
 R^9 is lower alkyl, substituted lower alkyl or aryl-lower alkyl; and
 R^{10} is hydrogen, lower alkyl, substituted lower alkyl, aryl, aryl-lower alkyl, aroyl-lower alkyl or allyl;

and of salts thereof, which process is capable of being carried out as parallel array synthesis to

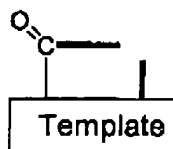
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yield libraries of numerous compounds of formula I in high yields and defined purities and which comprises

- (a) coupling a solid support derived from polystyrene crosslinked with divinylbenzene which is functionalized by means of a 2-chlorotrityl linker with an appropriately N-protected derivative of that amino acid which in the desired end-product is in position $n/2$, $n/2+1$ or $n/2-1$ if n is an even number and, respectively, in position $n/2+1/2$ or $n/2-1/2$ if n is an odd number, any functional group which may be present in said N-protected amino acid derivative being likewise appropriately protected;
- (b) removing the N-protecting group from the product thus obtained;
- (c) coupling the product thus obtained with an appropriately N-protected derivative of that amino acid which in the desired end-product is one position nearer the N-terminal amino acid residue, any functional group which may be present in said N-protected amino acid derivative being likewise appropriately protected;
- (d) removing the N-protecting group from the product thus obtained;
- (e) repeating, if necessary, steps (c) and (d) until the N-terminal amino acid residue has been introduced;
- (f) coupling the product thus obtained with a compound of the general formula

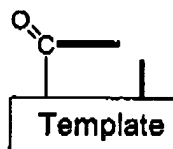


wherein



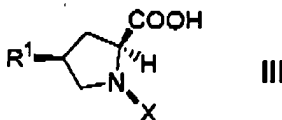
is as defined above and X is an N-protecting group or, if

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is to be group (a), above, alternatively

(fa) coupling the product obtained in step (d) or (e) with a compound of the general formula III



wherein R¹ and X are as defined above;

- (fb) removing the N-protecting group from the product thus obtained; and
- (fc) coupling the product thus obtained with an appropriately N-protected derivative of D-proline;
- (g) removing the N-protecting group from the product obtained in step (f) or (fc);
- (h) coupling the product thus obtained with an appropriately N-protected derivative of that amino acid which in the desired end-product is in position n, any functional group which may be present in said N-protected amino acid derivative being likewise appropriately protected;
- (i) removing the N-protecting group from the product thus obtained;
- (j) coupling the product thus obtained with an appropriately N-protected derivative of that amino acid which in the desired end-product is one position farther away from position n, any functional group which may be present in said N-protected amino acid derivative being likewise appropriately protected;
- (k) removing the N-protecting group from the product thus obtained;
- (l) repeating, if necessary, steps (j) and (k) until all amino acid residues have been introduced;
- (m) detaching the product thus obtained from the solid support;

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- (n) cyclising the product cleaved from the solid support by means of O-(7-azabenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate ("HATU") / 7-aza-1-hydroxybenzotriazole ("HOAt"); and
- (o) removing any protecting groups present on functional groups of any members of the chain of amino acid residues and, if desired, any protecting group(s) which may in addition be present in the molecule; and
- ~~(p) —optionally, converting the product thus obtained into a salt or converting a salt thus obtained into the corresponding free compound of formula I or into a different salt.~~

19. (Previously Presented) A process according to claim 18 wherein X and the N-protecting group of the amino acid derivatives is 9-fluorenylmethoxycarbonyl (Fmoc).

20. (Previously Presented) A modification of the process according to claim 18 for the manufacture of enantiomers of the compounds of formula I as defined in claim 18 in which all amino acids which have an asymmetric α -carbon atom are used in their D-Form and the enantiomer of a template corresponding to structure (a), (b), (c), (d) or (e) or a template corresponding to formula (f), (g) or (h) is used in step (f) and, respectively, the enantiomer of a compound of formula III is used in step (fa) and a derivative of L-proline is used in step (fc).

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

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25. (Canceled)

26. (Canceled)

27. (New) A process according to claim 18, further comprising converting the product thus obtained into a salt or converting a salt thus obtained into the corresponding free compound of formula I or into a different salt.

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